Comfort Digisystem User manual

SecureStream Technology

Comfort Digisystem

Receiver DH10

North America / English

Comfort Audio
HEAR THE FUTURE

User manual

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1) Introduction to the Comfort Digisystem

Thank you for choosing Comfort Digisystem. The products are easy to use, whether you use a hearing aid or not.

Before using the product, please read this User manual carefully.

With the Receiver DH10 receiver, the signal is received digitally, resulting in an excellent clear sound.
The Comfort Digisystem products feature SecureStream Technology – a unique, patented digital technology allowing eavesdrop-secure radio transfer in real time.

2) Regulatory information

Comfort Digisystem products are not to be used as a substitute to the hearing aids and should be used in accordance with the specifications and recommendations provided by your physician.

NOTE! Max output > 130 dB SPL (Sound Pressure Level). Could be very dangerous for your hearing.
It is recommended that customers keep the volume control in the lowest position, when turning on the device. If not, the sound could potentially cause harm to the customers' hearing.

Comfort Audio is not liable for damages arising from usage of the equipment not in accordance with the instructions provided by Comfort Audio. Comfort Audio shall not be liable for performance problems and/or damages caused in any way by customer's modification of any part of the equipment.

Federal Communications Commission Statement, This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.
FCC ID: UOJ-DG01R

Industry Canada,
This device complies with Industry Canada licence-exempt RSS standard(s).
Operation is subject to the following two conditions:
(1) this device may not cause interference, and
2) this device must accept any interference, including interference that may cause undesired operation of the device.
IC ID: 6769A-DG01R

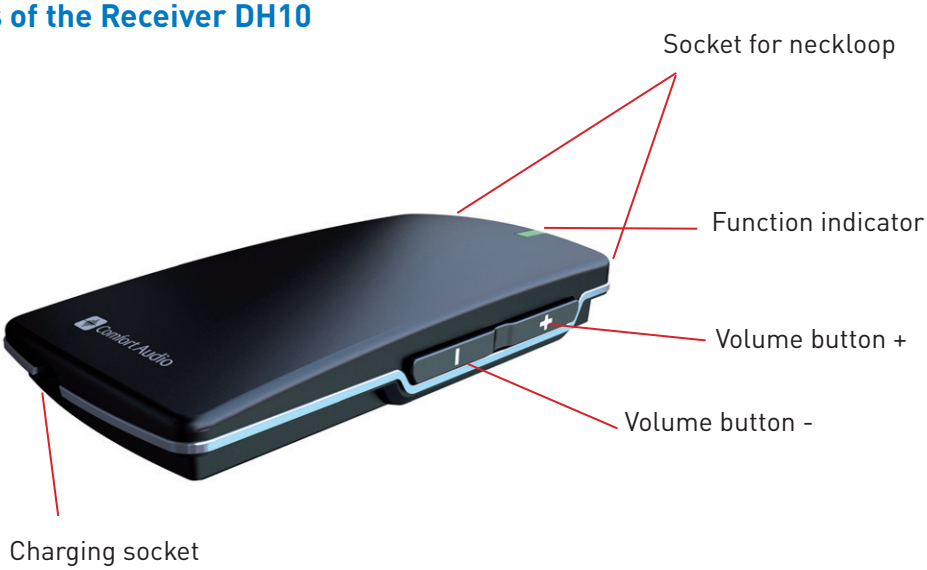
ETL
Conforms to UL Standard for Safety for Audio, Video and Similar electronic apparatus – Safety Requirements UL 60065, Issue:2003/06/30 Ed:7 Rev:2007/12/11
Certified to CSA Standard for Safety for Audio, Video and Similar electronic apparatus – Safety Requirements CAN/CSA-C22.2 No. 60065:03, Issued 2003/04/01 Ed:1 Amendment 1:2006
Intertek ETL Control number: 4002355

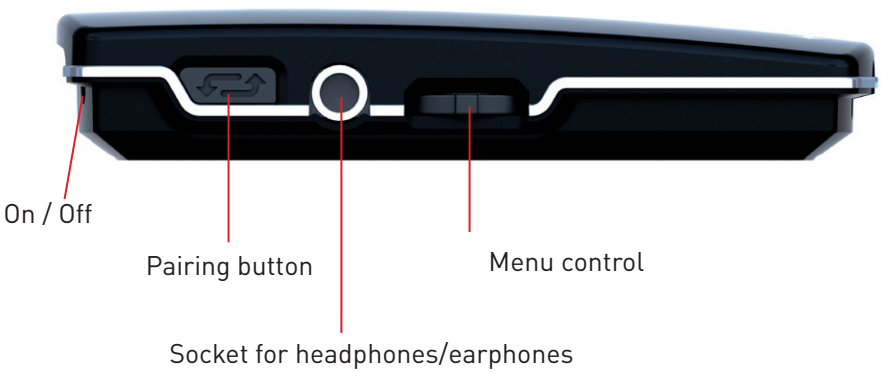
WARNING!
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
-- Reorient or relocate the receiving antenna.
-- Increase the separation between the equipment and receiver.
-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-- Consult the dealer or an experienced radio/TV technician for help.

DANGER!
DO NOT USE the **COMFORT DIGISYSTEM products** if you have a **PACEMAKER** or other implanted device. The Comfort Digisystem products could cause the pacemaker or other implanted device to malfunction and cause serious injury or death.

3) Functions of the Receiver DH10





Display indicating active neckloop

Display indicating connected headphones/earphones

4) Included accessories

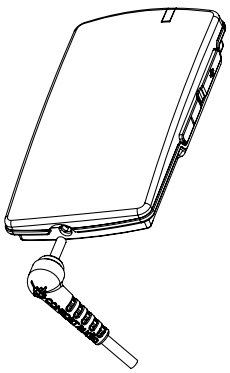
- Charger A11
- Split cable
- Neckloop

5) Getting started

Charging

The Receiver DH10 is chargeable. Charge the DH10 at least two hours before using it the first time. An empty battery is fully charged within two hours.

During charging, the function indicator shows red and a lightning bolt appears through the battery symbol in the display. Once the battery symbol is filled with green columns and the functions indicator shows green, the unit is fully charged and switches to automatic float charging.



Connecting a charger to the Receiver DH10

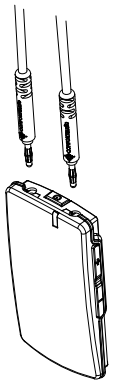
Please note:

Only use the charger supplied by Comfort Audio. Changing the battery without the assistance of an authorized dealer will void the Limited Warranty.

First time use

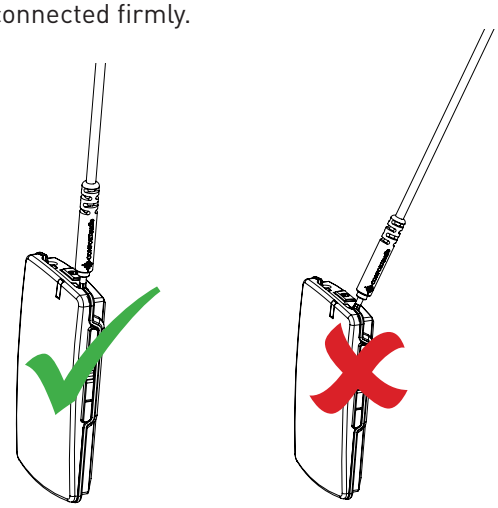
Switch on the transmitter by pressing the On/Off button for around two seconds.

Connect the neckloop or earphones/headphones in combination with the neckloop. The neckloop is then disconnected and acts as a necklace (it can be removed if you want).

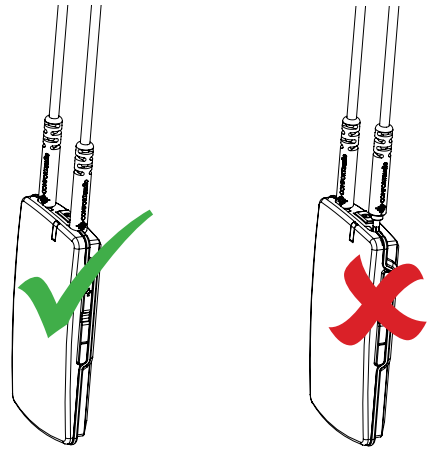


Connect neck loop carefully. The contacts have to be pressed in straightly.

Press in the contacts to the end. Check that the neck loop is connected firmly.



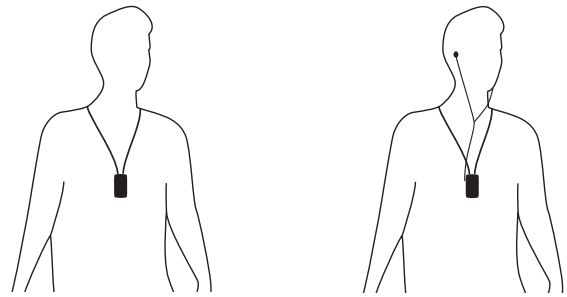
When putting on/taking off the receiver connected to the neck loop, be careful that the contacts do not break off.



Listen to the microphone in the transmitter.

(**Please note:** Start listening at low volume). Too loud a sound may damage your hearing.
Adjust the volume with the volume buttons.

If you listen with a neckloop and a hearing aid, set the hearing aid to the T or MT position.



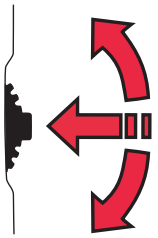
With neckloop

With neckloop and earphones

6) Menu and settings

Menu control

Three different selections can be made:



Scroll up

Press/select

Scroll down

To access the menu, press the menu control:

Back
Communication
- ↳ *Channel*
- ↳ *Pair*

Sound
- ↳ *Balance*
- ↳ *Max volume*
- ↳ *Fix volume*

Settings
- ↳ *PIN-code*
- ↳ *Charge*
- ↳ *Language*
- ↳ *Name*
- ↳ *Button sound*
- ↳ *Func. indicator*
- ↳ *Factory Reset*

Key lock
About

Back (relates to both the main menu and submenus)

Here you can choose to return to the menu and to the main display.

Communication

Channel

To use the receiver and the transmitter together, they must be set to the same channel. The transmitter and receiver are set to the default channel by the manufacturer.

Change channel:

1. Choose **Channel** in the menu.
2. Select a new channel using the menu control.

Channel information is also given when the units are paired.

FFC (Free Frequency Check) indicates in green the suitable frequencies for the specific environment.

Pair

To use a receiver and transmitter together, they must be paired. All transmitters and receivers are default paired at the factory and will work together.

NB! To prevent eavesdropping, a new code key must be generated and transmitted between the units by pairing.

Transmitting/receiving of pairing information along with a new code can be performed from any Comfort Digisystem unit with a display.

To pair units without a display, see section *Pairing (via pairing button)* for more information. Pairing information or a new code key can be received by several activated units.

Pairing (via menu)

1. Choose **Communication - Pair**
2. Select **Receive info** on one unit. **Ready to receive pairing info** is shown in the display.
3. Select **New code** on the other unit; select **Yes**.
4. **Generate new code and send info?** is shown in the display. Select **Yes** (Now both the channel and the coding information have been sent, and sound transfer is eavesdrop-secure).
5. To pair another unit into your coded system, select **Send info** instead on one of your paired units.

Pairing (via pairing button)
(The only way of pairing units without a display, with the pairing button).
You can activate the Pairing function via the pairing button.

1. One brief press of the button opens the *Pairing* menu.
2. Two brief presses activate the **Send info** function.
3. One long press activates the **Receive info** function.

Sound

Balance
If you use the Receiver DH10 with head- or earphones, you can adjust the balance for the right end left ear with the menu control (scroll up or down). Press the menu control to return to the menu.

Max volume
Activate the *Max volume* function by ticking in the box. Choose *Settings* to adjust the maximum volume. Scroll the menu control up and down to increase or decrease the level.

Fixed volume
Activate the *Fixed volume* function by ticking in the box. Choose *Settings* to set a permanent volume level. Use the menu control and change the level by scrolling up or down.

Settings

PIN-code
Here you can turn the PIN code function on and off (selected functions lock).
Under the menu item **Change PIN** you can create your own PIN code.
Under the menu item **Lock Select**, you can select different types of menu locks:

- *Sound: Locks all functions in the "Sound" menu (can be combined with the "Pairing" menu item)*
- *Pairing: Locks all pairing functions in the unit, as well as the pairing button*
- *All menus: Locks all menus*
- *Hide PIN entry: When the PIN-code is enabled, it is only possible to unlock the menu within 3 seconds after starting the unit, by pressing the menu control.*

A PIN-code is needed to be able to unlock selected functions when PIN-code has been activated.
If you forget your PIN-code, please contact your point of purchase to unlock the unit.

Charge
Here you can activate the **Auto Power Off** function to shut down the unit automatically during charging. If **Auto restart** is activated, the unit will start automatically when the charger is disconnected or loses power.

Language
For selection of menu language.

Name
Here the text to be displayed is selected. Choose symbols with the menu control. Select ✓ to save and x to close without saving. To move the cursor during editing, use the symbols > and <.

Button sound
For activating or deactivating the button sound.

Func. indicator
Here you can enable or disable the function indicator. This function does not affect charging and pairing status.

Factory Reset
Resets the unit to it´s original settings and erases all pairing information. To obtain security against eavesdropping, a new code key must be generated or received from another unit in existing coded system.

Key lock

Here you can activate the key lock and thereby lock all buttons. Once the key lock has been activated, **Unlock keys?** appears in the display. Select **Yes** to unlock.

About

Software information.

7) More functions

Function indicator (LED)

The function indicator shows the unit's status.

On normal operation, the indicator flashes once every three seconds.

During charging the indicator shows red.
When the charging is completed, the indicator shows green.

When the battery level gets low, the indicator slowly flashes red (check the battery status on the display).

Once the unit has been set to receive pairing information, the indicator flashes green quickly.

When receiving pairing information, the indicator shows green for three seconds.

When sending pairing information, the indicator flashes red five times.

If the radio signal is weak, the indicator flashes red.

8) Radio range and channels

The transmitter and receiver have built-in antennas. The radio range between the units is around 100 feet (30 metres). This may however vary depending on the particular environment you are in.

Like all radio systems, Comfort Digisystem communicates on specific channels. If you use two transmitters on the same channel or a neighbouring one, there may be interference. Other electronic equipment can also interfere with radio transmissions.

The channel that you use in your country is perhaps not permitted abroad. Always get in touch with your hearing aid provider in your country in order to find out which channels are permitted in different countries.

Comfort Audio is not liable for unauthorized use of radio waves, such as, but not limited to: interferences with police communication, or strategic communication, military installations etc.

9) Trouble shooting

The transmitter and receiver do not start
Charge the transmitter and receiver. Remember to press the On/Off button down for 2 seconds to switch the unit on. Check that the charger is connected to the plug socket.

Poor speech intelligibility
The distance between the transmitter and the receiver may be too long. The range is around 30 metres. The distance between the microphone and the person who is talking may also be too long; move the microphone nearer to the person talking.
Try to change channel/environment.

Poor range and interference
In some environments involving, e.g., concrete, iron or sheet metal structures, the range may be reduced. There may also be equipment nearby causing interference. Change channel.

No sound
Check that the transmitter and receiver are set to the same channel.

Loud hissing noise (no sound transfer)
Check that the units are paired.

The unit will not start during charging
Disconnect the charger. Check the selection **Auto power off** under **Settings** in the menu.

NB!
When using with a hearing aid, make sure that it works both in the T and the MT position.

10) Battery maintenance

The rechargeable products in the Digisystem series are equipped with Li-Pol batteries, ie. the same type of batteries used for most mobile phones and laptop computers on the market today. These types of batteries are able to store large amount of energy in relation to their weight and volume.

The capacity of Li-Pol batteries diminishes during its life cycle. The battery type has no "memory effect", which would mean that you need fully discharge the battery before charging to minimize capacity loss. This means that you can just as well charge the battery often and little, as opposed to seldom and much. Special charging circuits in the Digisystem products protect batteries from overcharging.

The capacity of the Li-Pol batteries deteriorates faster when they subjected to deep discharge. Therefore, all products of the Digisystem are fitted with a function that automatically turns off the product well before deep discharge occurs. Deep discharge may still happen as the battery has a certain self-discharge. A product that is fully or partly charged will with enough time reach a state when the battery deep discharges, unless the charger is connected. To avoid this we recommend that the battery is charged at least every 6 months.

11) Technical data

Type of receiver:	SST – SecureStream Technology
Range:	Approx. 100 feet (30 m)
Dimensions:	2,91 x 1,54 x 0,51 inches (74 x 39 x 13 mm)
Weight:	1,23 oz (35 g)
Frequency range:	904 - 927 MHz
Antenna:	Built-in
Operating time:	Up to ten hours
Battery:	Chargeable Li-Polymer
Charging time:	Approx. two hours
Connections:	Neckloop, headphones/earphones

Conforms to ANSI/UL Std.60065

Certified to CAN/CSA Std.C22.2 No.60065:03

Intertek
4002355

The weights, dimensions, capacities, performance ratings and other data in Comfort Audio's brochures, prospectus, circulars, advertisements, price lists and instructions sheets are mentioned only as general information. They are only approximate and shall not bind Comfort Audio.

12) Service and warranty

Warranty extension
Comfort Audio Inc. warrants this product sold to the first end user (buyer) against defects in materials or workmanship for the time period and as set forth below. Pursuant to this Limited Warranty, Comfort Audio will, at its own option, either (a) repair the product or the parts determined to be defective, using new or refurbished parts, or (b) provide you with a new, or at our option, a refurbished unit. The repaired or exchanged unit is under warranty for the remainder of the original product's warranty period. The warranty does not include any other direct, indirect or consequential damage or loss, or any third party damages or losses.

This Limited Warranty is for a period of two years from the date of purchase as indicated by an original receipt from a Comfort Audio authorized retailer, dispenser or medical facility. For accessories, the warranty period is 90 days as of the date of delivery.

How to make a warranty claim
For warranty service, you must contact the Comfort Audio Customer Service listed below to obtain an RMA (Return Merchandise Authorization) number. A description of the defect, your name, address and telephone number is required.

Ship the product freight prepaid via UPS or its equivalent, including a copy of the original purchase receipt, any cables, earphones and base/charger unit, in its original packaging or one that offers equal protection. Insure your shipment for loss or damage. Comfort Audio accepts no liability in case of damage or loss en route to our offices.

This Limited Warranty does not cover
Damage from misuse, neglect or normal wear and tear. Products that have been modified. Products purchased or serviced outside the territory. If you purchased your product outside the territory, see your retailer for warranty information.

Product Registration
Please complete, sign and mail the Product Registration Card packed with your unit. It will make it easier to contact you if it ever would be necessary.

Comfort Audio Inc.
350 South Northwest Hwy, Ste 300
Park Ridge, IL 60068 USA

To contact the Comfort Audio Customer Service,
call (847) 656 5450
or by e-mail usa@comfortaudio.com

13) Important safety instructions - Read these before using your product

1) Read these instructions.

2) Keep these instructions.

3) Heed all warnings.

4) Follow all instructions.

5) Do not use this apparatus near water.

6) Clean only with dry cloth.

7) Do not use near any heat sources such as radiators heat registers stoves, or other apparatus (including amplifiers) that produce heat.

8) Do not defeat the safety purpose of the polarized or arounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong.
The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet consult an electrician for replacement of the obsolete outlet. (Only when using polarized plug)

9) Protect the power cord from being walked on or pinched particularly at plugs convenience receptacles. and the point where they exit from the apparatus.

10) Only use attachments/accessories specified by Comfort Audio AB.

11) Unplug this apparatus during lightning storms or when unused for long periods of time.

12) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way such as power-supply cord or plug is damaged liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture does not operate normally or has been dropped.

13) Start listening at a low volume.

14) Too high a volume can seriously damage your hearing.

15) Don't disassemble the product.

16) Should the product break open because of damage, service should only be done by qualified service personnel.

17) Never use a transmitter or receiver set to a nonpermitted frequency. Check with the frequency authority in the country where the equipment is to be used.

18) The product contains sensitive electronic equipment and must be handled carefully.

19) Never charge product in closed, unaired spaces such as handbags, cases or other closed storage bags.

20) Only use batteries and power supply specified by Comfort Audio AB.

21) You must not change the battery yourself; please contact your point of purchase.

22) CAUTION! Danger of explosion if battery is incorrectly replaced.

23) The product shall not be exposed to excessive heat such as sunshine, fire or the like.

24) Products include radio transmitters. Do not use products where it is not allowed to use electronic equipment, e.g. on airplanes.

25) The necklace should not be used if there is a risk of getting stuck, e.g. in a machine or other objects.

26) Keep small parts out of reach of children and animals.Choking hazard if swallowed.

27) Do not leave the product unloaded for too long, the battery could get damaged.

28) Do not keep the product connected to the charger if it is not used for a longer period.

Subject to change

Comfort Audio
HEAR THE FUTURE

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